



# Iowa Statewide Communication Interoperability Plan (SCIP)

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## EXECUTIVE SUMMARY

The Iowa Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. The SCIP is a critical mid-range (three to five years) strategic planning tool to help Iowa prioritize resources, strengthen governance, identify future investments, and address interoperability gaps.

The purpose of the Iowa SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels.
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding.
- Provide the Iowa Statewide Interoperable Communications System Board (ISICSB) and Enhanced 911 (E-911) Communications Council a shared Vision and Mission with mutually supporting and coordinated Goals and Initiatives.
- Encourage the development of interoperable emergency communications guidelines, common standards, and procedures.
- Support efforts focused on training, education, and outreach for interoperable communications that can be used by all entities statewide.

The following are Iowa's Vision and Mission for improving emergency communications operability, interoperability, and continuity of communications statewide.

**Vision:** All emergency response entities in Iowa can access common interoperable statewide voice and data systems within established guidelines

**Mission:** Achieve the highest level of interoperability between all emergency response entities in support of public safety within Iowa through:

- Performance of duties as required by the Code of Iowa
- Stakeholder driven organization and governance structures (E-911 Communications Council and ISICSB)
- Integration, sharing, and coordination of resources
- Reliable, standards-based shared mission critical communications infrastructure supporting voice, data, and public access to emergency services
- Pursuit and promotion of standardized statewide public safety and Homeland Security communications interoperability policies
- Coordinated outreach effort which demonstrates the needs and requirements of voice and data interoperability for public safety

- A defined communications entity as designated by each county (e.g., Office of Emergency Communications)

The following strategic goals represent the priorities for delivering Iowa's vision for interoperable and emergency communications.

- Governance –
  - Effective coordinated approach between entities (e.g., ISICSB and E-911 Communications Council)
  - Established effective regional governance structures (e.g., regional interoperability committees [RICs])
  - Established core entity to coordinate emergency communications within each county in the State and participate in the regional governance structures
  - Established Office of Emergency Communications at the State and local levels to oversee all aspects of public safety communications and public warnings
  - Strengthened E-911 Communications Council authority as an advisory council
  - E-911 Communications Council membership representative of the current communications environment (e.g., Voice over Internet Protocol [VoIP] providers)
  - Administrative Rules inclusive of the process for E-911 Communications Council oversight of carryover funds
  - E-911 Communications Council and ISICSB bylaws reviewed and analyzed on a bi-annual basis and updated as needed to reflect the communications environment
- Standard Operating Procedures (SOPs) –
  - Formalized system/process for managing the life cycle of SOPs and guidelines
    - Current Wireless 911 Guidelines
    - Recommended standard call-taking procedures
  - Consistent statewide policies and procedures for interoperability solutions (e.g., public safety answering points [PSAPs], land mobile radio [LMR], and public safety broadband)
- Technology –
  - Formalized strategy for statewide build-out of the Nationwide Public Safety Broadband Network (NPSBN) in Iowa
  - Established statewide standards to include Radio – Association of Public Safety Communications Officials (APCO) Project 25 (P25), E-911 –

National Emergency Number Association (NENA) i3, data – First Responder Network Authority (FirstNet)

- Next Generation 911 (NG911) equipment installed at PSAPs to utilize end-to-end NG911 Emergency Services IP Network (ESInet)
- Wireline to wireless network migration
- Training and Exercises –
  - Developed standard exercise protocols for emergency communications and data interoperability to support exercises at local, regional, and State levels
  - Maintained statewide communications asset management system (e.g., Communications Asset Survey and Mapping [CASM] Tool)
  - Conducted Technical Assistance (TA) training focused on the dispatcher's role in successful emergency communications
- Usage –
  - Regular usage of designated interoperability channels
  - Implemented plan for using plain language during multi-agency and/or multi-jurisdictional events (e.g., Incident Command System [ICS] standards)
  - Accurately captured PSAP operational data, revenue, and expenditures for efficiency at the State and local level for all PSAPs
- Outreach and Information Sharing –
  - Established effective outreach approach, structure, and program among regional governance structures, stakeholders, citizens, and legislature
- Life Cycle Funding –
  - Established annualized funding source(s) for ISICSB
  - Dedicated funding source at the State for E-911
  - Maintained funding source at the local level (beyond 911 fees) for E-911
  - Reviewed use of 911 surcharge funds and further definition of what is eligible for expenditures

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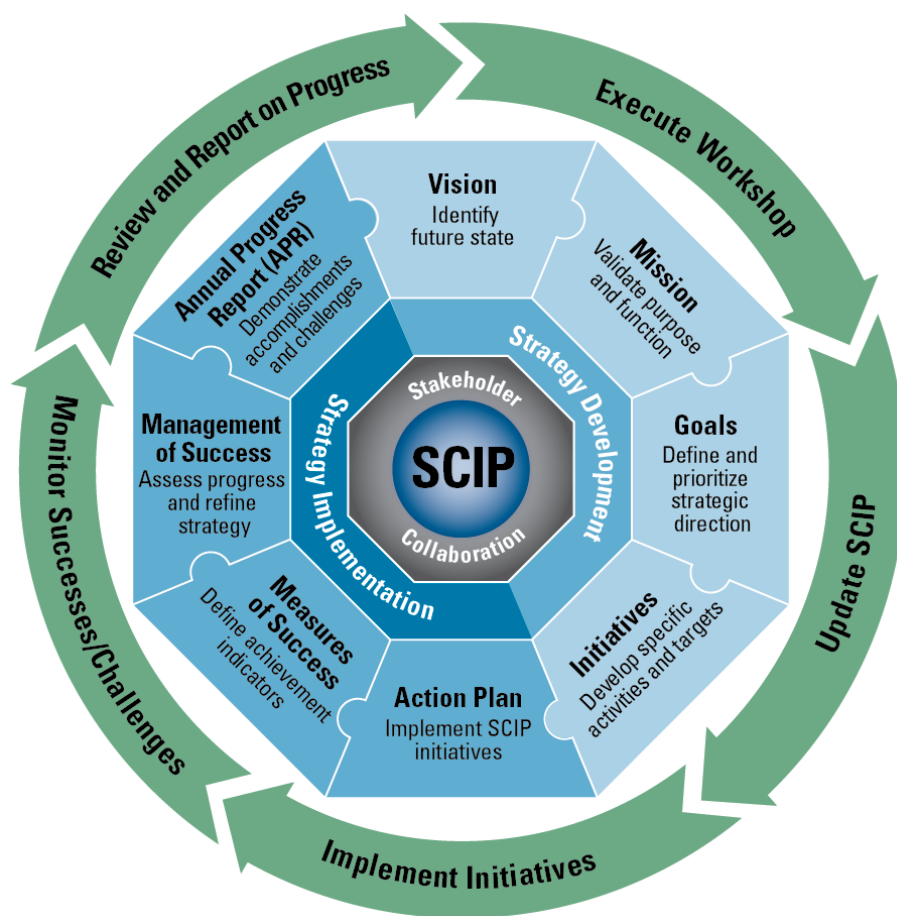
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## 1. INTRODUCTION

The Iowa Statewide Communication Interoperability Plan (SCIP) is a stakeholder-driven, multi-jurisdictional, and multi-disciplinary statewide strategic plan to enhance interoperable and emergency communications. The SCIP is a critical mid-range (three to five years) strategic planning tool to help Iowa prioritize resources, strengthen governance, identify future investments, and address interoperability gaps. This document contains the following planning components:

- Introduction – Provides the context necessary to understand what the SCIP is and how it was developed.
- Purpose – Explains the purpose/function(s) of the SCIP in Iowa.
- State's Interoperable and Emergency Communications Overview – Provides an overview of the State's current and future emergency communications environment and defines ownership of the SCIP.
- Vision and Mission – Articulates the State's three- to five-year vision and mission for improving emergency communications operability, interoperability, and continuity of communications at all levels of government.
- Strategic Goals and Initiatives – Outlines the strategic goals and initiatives aligned with the three- to five-year vision and mission of the SCIP and pertains to the following critical components: Governance, Standard Operating Procedures (SOPs), Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.
- Implementation – Describes the process to evaluate the success of the SCIP and to conduct SCIP reviews to ensure it is up-to-date and aligned with the changing internal and external environment.
- Reference Materials – Includes resources that provide additional background information on the SCIP or interoperable and emergency communications in Iowa or directly support the SCIP.

Figure 1 provides additional information about how these components of the SCIP interrelate to develop a comprehensive plan for improving interoperable and emergency communications.



**Figure 1: SCIP Strategic Plan and Implementation Components**

The Iowa SCIP is based on an understanding of the current and mid-range interoperable and emergency communications environment. Iowa has taken significant steps towards enhancing interoperable and emergency communications, including:

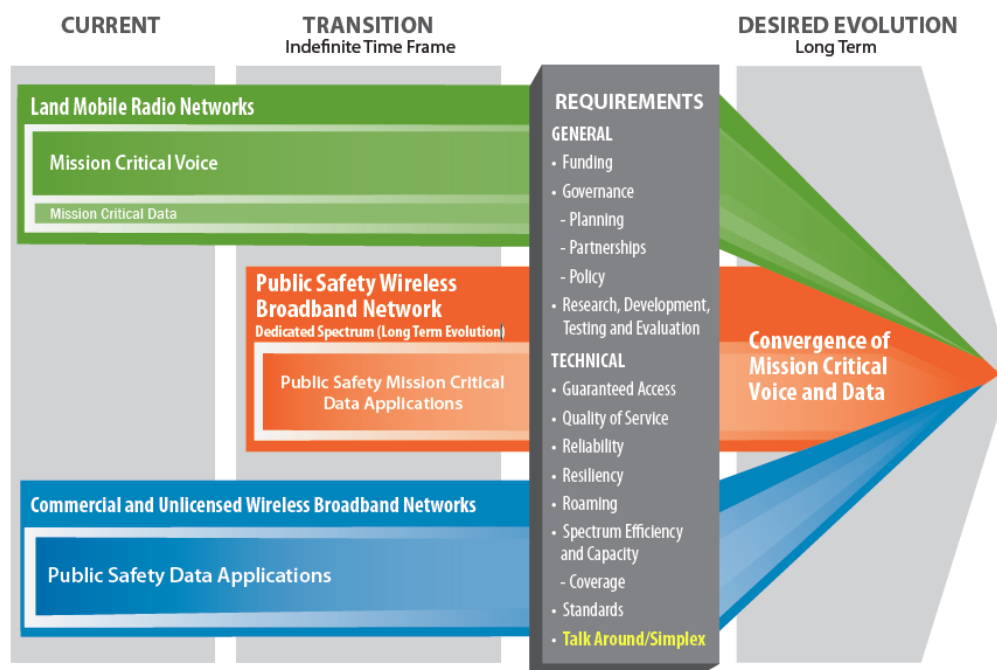
- Coordinating efforts between Iowa's Statewide Interoperable Communications System Board (ISICSB) and Enhanced 911 (E-911) Communications Council through a shared vision and mission for Iowa and its SCIP
- Conducting training and exercises focused on Communications Unit operations, including Communications Unit Leader (COML), Communications Unit Technician (COMT), and Auxiliary Communications (AUXCOMM), which have provided advanced and more frequent training opportunities throughout the State
- Establishing Regional Interoperability Committees (RICs) in each of the six Homeland Security Regions to provide ideas and advisory input to the ISICSB

However, more remains to be done to achieve Iowa's vision. It is also important to note that this work is part of a continuous cycle as Iowa will always need to adapt to evolving technologies, operational tactics, and changes to key individuals (e.g., Governor, project champions). In the next three to five years, Iowa will encounter challenges relating to



operability, interoperability, geography, aging equipment/systems, emerging technologies, changing project champions, and sustainable funding.

Wireless voice and data technology is evolving rapidly and efforts are underway to determine how to leverage these new technologies to meet the needs of public safety. For example, the enactment of the Middle Class Tax Relief and Job Creation Act of 2012 (the Act), specifically Title VI, related to Public Safety Communications, authorizes the deployment of the Nationwide Public Safety Broadband Network (NPSBN). The NPSBN is intended to be a wireless, interoperable nationwide communications network that will allow members of the public safety community to securely and reliably gain and share information with their counterparts in other locations and agencies. New policies and initiatives such as the NPSBN present additional changes and considerations for future planning efforts and require an informed strategic vision to properly account for these changes. Figure 2 illustrates a public safety communications evolution by describing the long-term transition toward a desired converged future.



**Figure 2: Public Safety Communications Evolution**

Integrating capabilities such as broadband provide an unparalleled opportunity for the future of interoperable communications in Iowa. It may result in a secure path for information-sharing initiatives, Public Safety Answering Points (PSAP), and Next Generation 911 (NG911) integration. Broadband will not replace existing Land Mobile Radio (LMR) voice systems in the foreseeable future due to implementation factors associated with planning, deployment, technology, and cost. A cautious approach to this investment is needed. Therefore, robust requirements and innovative business practices must be developed for broadband initiatives prior to any implementation.

There is no defined timeline for the deployment of the NPSBN; however, Iowa will keep up-to-date with the planning and build-out of the NPSBN in the near and long term in



coordination with the First Responder Network Authority (FirstNet). FirstNet is the independent authority within the National Telecommunications and Information Administration (NTIA) and is responsible for developing the NPSBN, which will be a single, nationwide, interoperable public safety broadband network. The network build-out will require continuing education and commitment at all levels of government and across public safety disciplines to document network requirements and identify existing resources and assets that could potentially be used in the build-out of the network. It will also be necessary to develop and maintain strategic partnerships with a variety of stakeholder agencies and organizations at the national, State, regional, local, and tribal levels and design effective policy and governance structures that address new and emerging interoperable and emergency communications technologies. During this process, investments in LMR will continue to be necessary and in the near term, wireless data systems or commercial broadband will complement LMR. More information on the role of these two technologies in interoperable and emergency communications is available in the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) Public Safety Communications Evolution brochure.<sup>1</sup>

To support efforts associated with public safety broadband in Iowa, the ISICSB applied for and was granted a conditional waiver by the Federal Communications Commission (FCC) in May, 2010, to operate in the 700 megahertz (MHz) broadband spectrum statewide. The increasing importance of high-speed data and its applications to public safety has motivated the ISICSB to begin planning for the construction of a high-speed broadband network that will complement its planned statewide LMR system-of-systems. After Federal legislation was passed in February of 2012 establishing the NPSBN using Long Term Evolution (LTE) high-speed wireless data technology, the Iowa Statewide Interoperability Coordinator (SWIC) and the ISICSB began planning for Iowa's participation in the NPSBN. Iowa collected information regarding specific State accomplishments made during the previous two and half years as a waiver recipient and submitted a proposal for the State and Local Implementation Grant Program (SLIGP). If Iowa is awarded SLIGP funding, the State will begin statewide educational outreach activities regarding the NPSBN.

Additionally, achieving sustainable funding in the current fiscal climate is a priority for Iowa. As State and Federal grant funding diminishes, States need to identify alternative funding sources to continue improving interoperable and emergency communications for voice and data systems. Key priorities for sustainable funding in Iowa are:

- Establishing annualized funding source(s) for the ISICSB and its related efforts
- Identifying and establishing dedicated E-911 funding sources at the State and local levels beyond 911 fees
- Working with Iowa's Governor and Legislature, through the SWIC, ISICSB and its legislative members, to secure critically needed funding to implement the ISICSB

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<sup>1</sup> OEC's Public Safety Communications Evolution brochure is available here:  
[http://publicsafetytools.info/oec\\_guidance/docs/Public\\_Safety\\_Communications\\_Evolution\\_Brochure.pdf](http://publicsafetytools.info/oec_guidance/docs/Public_Safety_Communications_Evolution_Brochure.pdf)

Master Plan<sup>2</sup> or an acceptable alternative solution to improve interoperability in Iowa

- Identifying alternate sources of funding for planning, training, and exercising interoperable communications
- Ensuring that the SWIC has the resources necessary to continue to be an inter- and intra-State leader for interoperable and emergency communications in the State of Iowa
- Ensuring full life cycle support of interoperable and emergency communications systems throughout the State, while linking disparate public safety radio communications systems into a 700 MHz LMR communications backbone
- Developing a long-term funding plan for the maintenance and administration of existing LMR systems

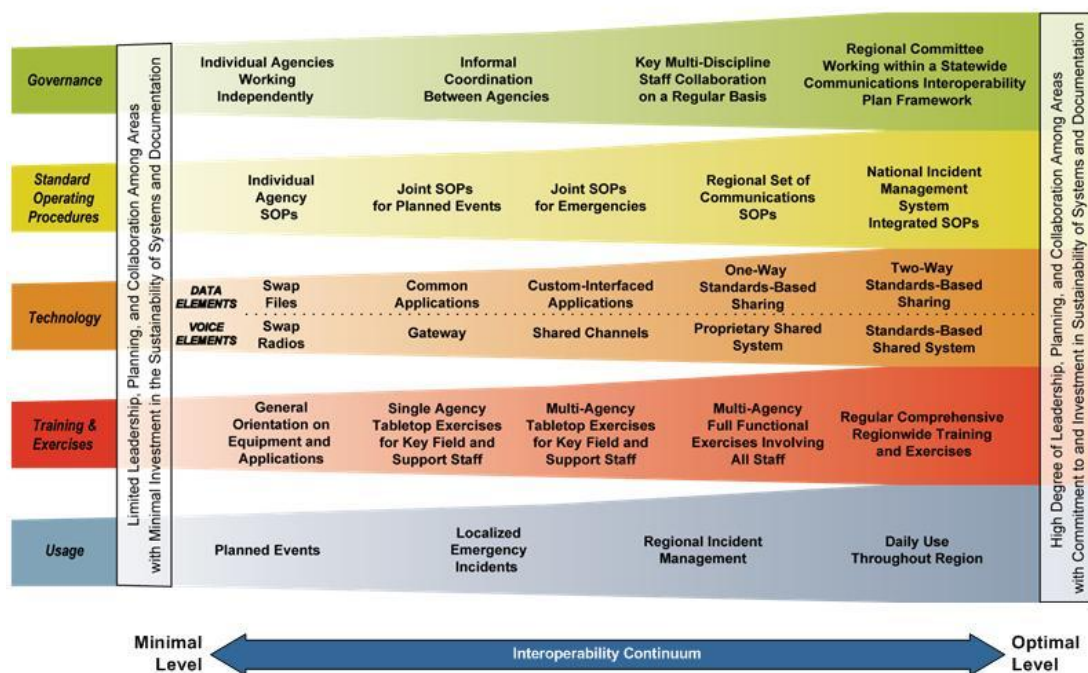
More information on a typical emergency communications system life cycle, cost planning, and budgeting is available in OEC's System Life Cycle Planning Guide.<sup>3</sup>

The Interoperability Continuum, developed by SAFECOM and shown in Figure 3, serves as a framework to address all of these challenges and continue improving operable/interoperable and emergency communications. It is designed to assist emergency response agencies and policy makers with planning and implementing interoperability solutions for voice and data communications.

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<sup>2</sup> In 2008, the ISICSB commissioned an independent consultant to survey Iowa's public safety communications systems and develop a statewide Master Plan. This Plan proposed utilizing the newly created 700 MHz public safety spectrum to create a statewide communications network allowing for interoperability at several different levels, as depicted in the SAFECOM Continuum. It was approved by the ISICSB and adopted as Iowa's public safety communications vision in November, 2009. Unfortunately, a lack of state funding has prevented any progress on this vision.

<sup>3</sup> OEC's System Life Cycle Planning Guide is available here:  
[http://publicsafetytools.info/oec\\_guidance/docs/OEC\\_System\\_Life\\_Cycle\\_Planning\\_Guide\\_Final.pdf](http://publicsafetytools.info/oec_guidance/docs/OEC_System_Life_Cycle_Planning_Guide_Final.pdf)



**Figure 3: The Interoperability Continuum**

The Continuum identifies five critical success elements that must be addressed to achieve a successful interoperable communications solution:

- **Governance** – Collaborative decision-making process that supports interoperability efforts to improve communication, coordination, and cooperation across disciplines and jurisdictions. Governance is the critical foundation of all of Iowa's efforts to address communications interoperability.
- **SOPs** – Policies, repetitive practices, and procedures that guide emergency responder interactions and the use of interoperable communications solutions.
- **Technology** – Systems and equipment that enable emergency responders to share voice and data information efficiently, reliably, and securely.
- **Training and Exercises** – Scenario-based practices used to enhance communications interoperability and familiarize the public safety community with equipment and procedures.
- **Usage** – Familiarity with interoperable communications technologies, systems, and operating procedures used by first responders to enhance interoperability.

More information on the Interoperability Continuum is available in OEC's Interoperability Continuum brochure.<sup>4</sup> The following sections will further describe how the SCIP will be used in Iowa and Iowa's plans to enhance interoperable and emergency communications.

<sup>4</sup> OEC's Interoperability Continuum is available here:  
<http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx>

## 2. PURPOSE

The purpose of the Iowa SCIP is to:

- Provide the strategic direction and alignment for those responsible for interoperable and emergency communications at the State, regional, local, and tribal levels
- Explain to leadership and elected officials the vision for interoperable and emergency communications and demonstrate the need for funding
- Provide the ISICSB and E-911 Communications Council a shared vision and mission with mutually supportive and coordinated goals and initiatives
- Encourage the development of interoperable emergency communications guidelines, common standards, and procedures
- Support efforts focused on training, education, and outreach for interoperable communications that can be used by all entities statewide

The development and execution of the SCIP assists Iowa with addressing the results of the National Emergency Communications Plan (NECP) Goals and the Federal government with fulfilling the Presidential Policy Directive 8 (PPD-8)<sup>5</sup> National Preparedness Goal for Operational Communications.<sup>6</sup>

In addition to this SCIP, Iowa will develop an Annual Progress Report (APR) that will be shared with OEC and other stakeholders to highlight recent accomplishments and demonstrate progress toward achieving the goals and initiatives identified in the SCIP. More information on the SCIP APR is available in Section 6.4.

Iowa developed this SCIP through a joint, three-day workshop in July/August 2013, involving the ISICSB and E-911 Communications Council. As a result, the Iowa SCIP is owned and managed jointly by the ISICSB and the E-911 Communications Council and includes a shared vision and mission for the two groups. The supporting goals and initiatives included in this SCIP represent both joint and individual goals for the ISICSB and E-911 Communications Council. The ISICSB and E-911 Communications Council have the authority to and are responsible for making decisions regarding this plan. The ISICSB and E-911 Communications Council are also responsible for ensuring that this plan is implemented and maintained statewide.

The SWIC is responsible for coordinating development of and updates to the SCIP. As part of this process, the SWIC provides the ISICSB and E-911 Communications Council members with regular updates on SCIP implementation progress during their monthly

<sup>5</sup> PPD-8 was signed in 2011 and is comprised of six elements: a National Preparedness Goal, the National Preparedness System, National Planning Frameworks and Federal Interagency Operational Plan, an annual National Preparedness Report, and ongoing national efforts to build and sustain preparedness. PPD-8 defines a series of national preparedness elements and emphasizes the need for the whole community to work together to achieve the National Preparedness Goal. <http://www.dhs.gov/presidential-policy-directive-8-national-preparedness>.

<sup>6</sup> National Preparedness Goal – Mitigation and Response Mission Area Capabilities and Preliminary Targets – Operational Communications: Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

1. Ensure the capacity to communicate with the emergency response community and the affected populations and establish interoperable voice and data communications between Federal, State, and local first responders.
2. Re-establish sufficient communications infrastructure within the affected areas to support ongoing life-sustaining activities, provide basic human needs, and transition to recovery.

meetings. The ISICSB and E-911 Communications Council are asked to provide input for development of the SCIP, and the Iowa SWIC is responsible for compiling data and submitting the SCIP to the ISICSB and the E-911 Communications Council for approval.

### **3. STATE'S INTEROPERABLE AND EMERGENCY COMMUNICATIONS OVERVIEW**

The ISICSB and E-911 Communications Council lead and support interoperable and emergency communications-related efforts in Iowa. These two groups exist as separate but closely coordinated entities who share a common vision and mission. The ISICSB was legislatively created and signed into law in 2007 (Code of Iowa, Sections 80.28 and 80.29.) and hired its first full-time SWIC in 2010. The ISICSB is comprised of six committees: Governance, Financial, Operations, Technical, Outreach and Education, and NPSBN. The E-911 Communications Council was established to serve in a consultative role with the E-911 Program Manager and the Director of the Homeland Security and Emergency Management Department (HSEMD). The goal of the Council is to advise and make recommendations to the Director and Program Manager regarding implementation and development of the 911 system in Iowa.

Iowa's interoperable and emergency communications environment consists mainly (75 percent) of disparate very-high frequency (VHF) systems, some (approximately 15 percent) 800 MHz systems, and a small number of ultra-high frequency (UHF) systems. While numerous State agencies use emergency communications systems, the State of Iowa currently does not have a statewide public safety radio system or network due to lack of funding and the need for greater legislative support. Regional, State, and local agencies' radio communications systems consist primarily of separate systems; however, RACOM Communications, a privately owned and operated analog communications system, maintains a substantial presence in Iowa serving public safety agencies.

Efforts to explore development of a statewide LMR system began in 2008 when the ISICSB commissioned the development of a Master Plan. This plan proposed establishment of a statewide 700 MHz LMR communications backbone that would allow the many disparate public safety radio communications systems in Iowa to connect to a statewide network. Unfortunately, due to a lack of State funding for this project, the Master Plan has not been implemented. The most significant challenge has been in trying to improve statewide interoperability through alternatives to the costly Master Plan. More recently, in 2012, the SWIC presented the Iowa legislature with an alternative plan that would connect the disparate local, regional, and State systems into a system-of-systems network; however, this proposal was not acted upon by the legislature and did not receive legislative funding. The ISICSB continues to study alternative proposals, though a lack of State funding has prevented any further progress on achieving this vision.

In addition to addressing Iowa's LMR interoperability issues, the ISICSB, in coordination with the E-911 Communications Council, is actively pursuing the feasibility of providing broadband data usage to public safety agencies throughout the State. In May 2010, the ISICSB was granted an FCC waiver to operate in the 700 MHz broadband spectrum in

which ISICSB plans to build-out a high speed broadband network to complement its planned statewide LMR system-of-systems. Now that Federal legislation has created the NPSBN, the Iowa SWIC and ISICSB are pursuing plans to participate in the NPSBN as soon as it is established in Iowa (which is anticipated in the next 2-3 years) with the end result being full interoperability established in the State of Iowa by 2018.

#### **4. VISION AND MISSION**

The Vision and Mission section describes the Iowa vision and mission for improving emergency communications operability, interoperability, and continuity of communications statewide.

##### **Iowa Interoperable and Emergency Communications Vision:**

All emergency response entities in Iowa can access common interoperable statewide voice and data systems within established guidelines

##### **Iowa Interoperable and Emergency Communications Mission:**

Achieve the highest level of interoperability between all emergency response entities in support of public safety within Iowa through:

- Performance of duties as required by the Code of Iowa, Sections 80.28 and 80.29
- Stakeholder driven organization and governance structures (E-911 Communications Council and ISICSB)
- Integration, sharing, and coordination of resources
- Reliable, standards-based shared mission critical communications infrastructure supporting voice, data, and public access to emergency services
- Pursuit and promotion of standardized statewide public safety and Homeland Security communications interoperability policies
- Coordinated outreach effort which demonstrates the needs and requirements of voice and data interoperability for public safety
- A defined communications entity as designated by each county (e.g., Office of Emergency Communications)

## **5. STRATEGIC GOALS AND INITIATIVES**

The Strategic Goals and Initiatives section describes the statewide goals and initiatives for delivering the vision for interoperable and emergency communications. The goals and initiatives are grouped into seven sections, including Governance, SOPs, Technology, Training and Exercises, Usage, Outreach and Information Sharing, and Life Cycle Funding.

### **5.1 Governance**

The Governance section of the SCIP outlines the future direction of the Iowa governance structure for interoperable and emergency communications. Interoperable and emergency communications-related governance in Iowa is executed through two primary entities: the ISICSB and the E-911 Communications Council. The ISICSB is responsible for improving interoperability in Iowa by creating, implementing, training, and operating a statewide interoperable communications system. The ISICSB was legislatively created and signed into law in 2007 (Code of Iowa, Sections 80.28 and 80.29.) and in 2010, hired its first full-time SWIC, who was designated as the primary day-to-day point of contact (POC) for interoperability in Iowa and for the ISICSB. In 2012, the ISICSB (with assistance from the SWIC) was appointed officially by the Iowa Governor as the POC to assist in the planning and build-out of the NPSBN in Iowa. As noted in Section 3, the ISICSB is comprised of six committees: Governance, Financial, Operations, Technical, Outreach and Education, and NPSBN.

The E-911 Communications Council focuses on 911-related efforts in the State and works closely with the ISICSB to ensure a shared emergency communications vision and mission between the two groups is realized in Iowa. The Council was established to serve in a consultative role with the E-911 Program Manager and the Director of the HSEMD. The goal of the Council is to have the appropriate stakeholders in place to advise and make recommendations to the Director and Program Manager regarding implementation and development of the 911 system in Iowa. Current membership includes public safety stakeholders representing response disciplines of fire, law enforcement, Emergency Medical Services (EMS), as well as representatives of public safety professional associations, emergency management, service providers, and the public.

Under Chapter 34A of the Code of Iowa (Iowa Administrative Code, Section 605, Chapter 10), the HSEMD 911 Program office has the responsibility for the administration of the Iowa E-911 program. The law requires that each county within the State establish a joint 911 service board. Each board has the responsibility to develop a countywide E-911 plan, detailing the manner and cost for the implementation of an E-911 system. However, joint 911 service boards are not required to implement service. HSEMD reviews and approves these plans. All 99 counties have approved E-911 service plans.

In 2012, a high-level review of E-911 and interoperable communications in Iowa was conducted in an effort to improve the ability of public safety personnel to communicate across jurisdictional boundaries during regional and large-scale emergencies. Results from the study recommended that the ISICSB formally adopt a joint statewide interoperability vision and mission for Iowa with the E-911 Communications Council and



that the SCIP be revised to combine goals and initiatives for both organizations. While the ISICSB and the E-911 Communications Council remain separate entities with no one group overseeing the other, both organizations coordinate to work towards a common State emergency communications and interoperability vision. In 2013, the ISICSB and the E-911 Communications Council began coordinating responsibility for interoperable and emergency communications-related efforts in Iowa as demonstrated by their joint coordination and participation in their SCIP Revision Workshop.

While Iowa has made significant progress in terms of governance, Iowa counties indicated in their NECP Goal 2 results that governance is an area that must continue to be addressed. A significant number of counties in Iowa indicate that emergency communications governance is largely informal among their agencies and, as a result, strategic budget planning is not well coordinated.

Table 1 outlines Iowa's goals and initiatives related to governance.

**Table 1: Governance Goals and Initiatives**

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
1.	Effective coordinated approach between entities (e.g., ISICSB and E-911 Communications Council)	1.1 Continue to hold joint meetings, workshops, conferences, trainings, and other events to bring entities together	ISICSB and E-911 Communications Council	Annually in December
		1.2 Continue to include each entity on the other's meeting agenda	ISICSB and E-911 Communications Council	Monthly
		1.3 Hold a joint annual strategic planning meeting and update the SCIP	ISICSB and E-911 Communications Council	September 2014, annually each September
		1.4 Include representatives from each entity on subcommittees and task forces	ISICSB and E-911 Communications Council	August 2014, Annually/as needed
2.	Established effective regional governance structures (e.g., RICs)	2.1 Develop a localized governance structure for each region that represents the needs of its stakeholders	ISICSB Governance Subcommittee	January 2014
		2.2 Formalize two-way communication between the RICs and the ISICSB (e.g., add regional updates as an agenda item to ISICSB meetings)	ISICSB Outreach and Operations Subcommittees	January 2014

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		2.3 In collaboration with the RICs, identify regional goals and objectives	ISICSB Outreach and Operations Subcommittees	April 2014
		2.4 Develop a strategy or best practices to encourage participation within each RIC (e.g., solicit requirements, articulate the benefits of regional participation in broadband or other planning)	ISICSB Outreach and Operations Subcommittees	July 2014, annual review
3.	Established core entity to coordinate emergency communications within each county in the State and participate in the regional governance structures	3.1 Identify a single point of contact (POC) within each county in the State in accordance with State law	ISICSB Governance Subcommittee and 911 Program Manager	November 2013
		3.2 Identify representatives through the county POC to participate in each regional governance structure	ISICSB Governance and Outreach Subcommittees and E-911 Program Manager	January 2014
		3.3 Develop a strategy and incentives to encourage participation at the local level	ISICSB Outreach Subcommittee and each RIC	July 2014, annual review
4.	Established Office of Emergency Communications at the State and local levels to oversee all aspects of public safety communications and public warnings	4.1 Set up a joint committee of the E-911 Communications Council and ISICSB	E-911 Communications Council Chair; ISICSB Chair	August 2014
		4.2 Develop a conceptual white paper	E-911 Communications Council and ISICSB	November 2014
		4.3 Distribute white paper to gain buy in from all stakeholders and assess concept viability	E-911 Communications Council and ISICSB	November 2015
		4.4 Present concept at Governor's Homeland Security Conference	E-911 Communications Council and ISICSB	November 2015
		4.5 Develop legislative support	E-911 Communications Council and ISICSB	October 2016

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
5.	Strengthened E-911 Communications Council authority as an advisory council	5.1 Set up governance committee	E-911 Communications Council Chair	August 2013
		5.2 Define the additional authority that is needed and provide recommendations to E-911 Communications Council	E-911 Communications Council Governance Committee	February 2014
		5.3 Review and analyze administrative rules based on recommendation	HSEMD	May 2014
		5.4 Review and analyze Code if needed	HSEMD	May 2014
		5.5 Gain buy in and support from HSEMD Director and Governor's Office to revise administrative rules/Iowa Code if needed	HSEMD	October 2014
		5.6 Gain buy in from joint 911 Service Boards	E-911 Communications Council	October 2014
		5.7 Implement new authority	E-911 Communications Council	July 2015
6.	E-911 Communications Council membership representative of the current communications environment (e.g., Voice over Internet Protocol [VoIP] providers)	6.1 Set up membership committee	E-911 Communications Council Chair	August 2013
		6.2 Review E-911 Communications Council Membership	E-911 Communications Council Membership Committee	November 2013
		6.3 Provide recommendations for membership changes to E-911 Communications Council	E-911 Communications Council Membership Committee	January 2014
		6.4 Gain buy in from current member organization of E-911 Communications Council	E-911 Communications Council	February 2014

Governance Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		6.5 Provide recommendations to HSEMD Director and Governor's Office to develop legislation to revise Iowa Code	HSEMD, E-911 Program Manager	March 2014
		6.6 Implement membership changes	E-911 Communications Council	July 2015
7.	Administrative Rules inclusive of the process for E-911 Communications Council oversight of carryover funds	7.1 Develop and document process for E-911 Communications Council Review of applications	E-911 Program Manager	October 2013
		7.2 Write the administrative rules	E-911 Program Manager	December 2013
		7.3 Complete the administrative rule process	E-911 Program Manager	July 2014
8.	E-911 Communications Council and ISICSB bylaws reviewed and analyzed on a bi-annual basis and updated as needed to reflect the communications environment	8.1 Set up E-911 Communications Council Bylaws committee	E-911 Communications Council Chair	September 2013
		8.2 Analyze bylaws, develop, and present recommendations and necessary changes	E-911 Communications Council Bylaw Committee and ISICSB Governance Committee	December 2013
		8.3 Provide notice of bylaw changes	E-911 Communications Council and ISICSB	January 2014, Biennial

## 5.8 Standard Operating Procedures (SOPs)

The SOPs section of the SCIP identifies the framework and processes for developing and managing SOPs statewide. The ISICSB and E-911 Communications Council recognize the importance of the National Incident Management System (NIMS), Plain Language, Standard Channel Nomenclature, the use of the national interoperability channels, and SOPs as key components to communications interoperability. In November 2007, Iowa successfully demonstrated that 95 percent of the State was NIMS compliant. In 2010, the ISICSB established the Operations Committee to examine challenges the State was experiencing with incorporating plain language and standard

channel nomenclature in the Public Safety Interoperability Channels. It was determined that the ISICSB take a formal position on State standardization and strongly endorse the use of plain language and standard channel nomenclature in Iowa to improve interoperability.

In 2012, the E-911 Task Force Report recommended the establishment of SOPs for statewide interoperability channels. Additionally, ISICSB established and distributed SOPs for the use of the national interoperability channels statewide. In September 2012, the ISICSB also sponsored a Tactical Interoperable Communications Plan (TICP) workshop and developed a standardized TICP template while determining a rollout strategy to the six Homeland Security Regions and encourage development of county TICPs.

While the ISICSB has final governing authority over interoperability-related SOPs in Iowa, numerous branches of State government, local entities, and statewide organizations have discipline-specific SOPs for communications and interoperability policies and procedures. As a result, focused efforts are required to ensure coordination across relevant entities for SOP development and sharing in the State.

Table 2 outlines Iowa's goals and initiatives for SOPs.

**Table 2: Standard Operating Procedures Goals and Initiatives**

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
9.	Formalized system/process for managing the life cycle of SOPs and guidelines	9.1 Form a Joint Policy subcommittee	ISICSB and E-911 Communications Council	November 2013
		9.2 Develop appropriate SOPs and guidelines	Joint Policy Subcommittee	January 2014
		9.3 Conduct an annual review of existing SOPs and guidelines to ensure they are up to date and identify new SOPs and guidelines to be developed	Joint Policy Subcommittee	January 2015, annually in January
		9.4 Identify and implement new best practices in coordination with the RIC	ISICSB Governance Committee and E-911 Communications Council	January 2015, annually in January
9a.	Current Wireless 911 Call Taking Guidelines	9.5 Set up Guideline Committee	E-911 Communications Council Chair	March 2014
		9.6 Analyze guidelines and determine where new	E-911 Communications	May 2014

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		technology needs to be added. Revise and present recommendations and necessary changes	Council Guideline Committee	
		9.7 Seek local input on guidelines	E-911 Communications Council	June 2014
		9.8 Approve and provide notice of revised guidelines	E-911 Communications Council	July 2014
		9.9 Distribute standardized training recommendations on revised guidelines and use of new technology at PSAPs via website, email, handouts, presentation at Iowa's National Emergency Number Association (NENA)/Association of Public Safety Communications Officials (APCO) conference	E-911 Communications Council	October 2014
9b.	Recommended standard call-taking procedures	9.10 Coordinate with Telecommunicator Training Board (TTB) under Iowa Law Enforcement Academy (ILEA) to review current NENA and APCO standards	E-911 Communications Council Chair; E-911 Program Manager	September 2013
		9.11 Establish joint committee	E-911 Communications Council Chair; E-911 Program Manager	March 2014
		9.12 Review current NENA and APCO Standards and determine if additional guidelines should be developed	Joint Committee	September 2014
		9.13 Recommend a standard to E-911 Communications Council and TTB	Joint Committee	March 2015
		9.14 Adopt, publish, and distribute standard	E-911 Communications	September 2015

Standard Operating Procedures Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
			Council and TTB	
10.	Consistent statewide policies and procedures for interoperability solutions (e.g., PSAPs, LMR, and public safety broadband)	10.1 Identify best practices	Joint Policy Subcommittee	August 2014
		10.2 Develop policies and procedures based on identified best practices	Joint Policy Subcommittee	August 2015
		10.3 Approve recommended policies and procedures	ISICSB and E-911 Communications Council	October 2015
		10.4 Distribute policies and procedures	ISICSB and E-911 Communications Council	November 2015
		10.5 Review policies and procedures on a recurring basis to ensure consistency	Joint Policy Subcommittee	November 2017, Biennial

## 5.9 Technology

The Technology section of the SCIP outlines Iowa's plan to maintain and upgrade existing technology; the roadmap to identify, develop, and implement new and emerging technology solutions; and the approach to survey and disseminate information on current and future technology solutions to ensure user needs are met. Public safety agencies in Iowa use a diverse range of LMR resources to achieve interoperability in the State. Agencies use a variety of independent, stand-alone communications systems in the VHF, UHF, and 800 MHz bands (both P25 and analog), along with a privately-owned, wide-area, 800 MHz, trunked, Harris communications network owned by RACOM Communications, which plans to be upgraded into a digital, P25 system. Most counties share an emergency communications center for law enforcement, fire, and EMS; however, there are 117 PSAPs in Iowa's 99 counties. When agencies in Iowa operate in the same frequency band, they often use mutual aid channels for interoperable communications; gateways or console patches are used for agencies to interoperate between different frequency bands.

The ISICSB's vision for a statewide interoperable network is a standards based, P25 system-of-systems with its backbone operating in the 700 MHz frequency spectrum, adjacent to the new NPSBN spectrum. In addition to LMR-related efforts, the NPSBN will complement Iowa's planned statewide system and provide high-speed data applications. The ISICSB will be responsible for creating, implementing, and managing the new statewide interoperable communications system. For broadband-related efforts, the Iowa SWIC is coordinating with the ISICSB's Chair directing Iowa's efforts for establishing the NPSBN. In addition, the ISICSB recently completed the purchase of



three Strategic Technology Reserves (STRs), as the final STR investment justification contained in the Public Safety Interoperable Communications (PSIC) grant package. The ISICSB is in the process of obtaining proper FCC licensing to be able to fully deploy these STR assets.

The Department of Public Safety (DPS), Department of Natural Resources (DNR), and Department of Corrections (DOC) have requested extensions of the FCC Narrowbanding mandate to 2014. Much of the DPS equipment is out of date and loss of coverage has resulted from its narrowbanding efforts to date. It is anticipated that DPS, in coordination with the Department of Transportation (DOT) and DOC, will be issuing a Request for Proposal (RFP) in 2013 to substantially update and replace their statewide system with a 700 MHz P25 system, which will be consistent with the maser vision of the ISICSB, described previously.

The 99 counties in Iowa currently have responsibility for wireline 911 with specific emphasis on accessing, delivering, and managing the wireline calls from the fixed location point of origin through the network to the PSAP designated as responsible for responding to such 911 calls within its jurisdiction. The expansion of wireless devices drove deployment of a parallel network to accept, route, and deliver 911 calls made from wireless devices. The responsibility for answering, processing, and responding to wireless calls in a particular jurisdiction begins with the designated PSAP. However, the design and management of the network architecture used to transport the wireless call to the PSAP is the responsibility of the State 911 Program.

The wireless E-911 network is comprised of two geographically diverse data centers located in Des Moines and Newton. These data centers connect to the PSAP via an Internet protocol (IP) network, utilizing the Iowa Communication Network (ICN) wherever available. Wireless service providers send Signaling System 7 (SS7) messaging to the data centers for initial 911 call set-up. The system determines the appropriate PSAP to receive the call and delivers the call via IP circuits.

In 2009, HSEMD began planning for transition to an NG911 network utilizing an IP backbone to better deliver 911 calls in Iowa. HSEMD contracted with TeleCommunications Systems, Inc., (TCS) to implement an IP based network to deliver wireless 911 calls to primary PSAPs. The IP network creates a framework for the transition to a fully NENA i3 compliant network in the future. It allows PSAPs that have not yet upgraded to NG-capable equipment and those that have upgraded equipment to receive calls, including wireless, VoIP, and telematics via the IP network.

There are multiple technology challenges in Iowa including the use of six different bands of spectrum, diversity and age of equipment, and a mix of technologies and manufacturers. The lack of an established “statewide system” upon which to base investments in technology remains a challenge in Iowa and the ISICSB and State Patrol are each exploring costs and methodologies for future networks. The ISICSB requested funds in the 2011 and 2012 legislative session; however, no funding was appropriated for a statewide interoperable emergency communications system.

Table 3 outlines Iowa’s goals and initiatives for technology.

**Table 3: Technology Goals and Initiatives**

<b>Technology Goals and Initiatives</b>				
<b>Goal #</b>	<b>Goals</b>	<b>Initiatives</b>	<b>Owner</b>	<b>Completion Date</b>
11.	Formalized strategy for statewide build-out of the NPSBN in Iowa	11.1 Formalize a Public Safety Broadband Committee	ISICSB	November 2013
		11.2 Hire a consultant to conduct a broadband user needs assessment in accordance with SLIGP funding and guidance from FirstNet	ISICSB Public Safety Broadband Committee	Contingent upon guidance from FirstNet
		11.3 Hire a project manager to oversee statewide public safety broadband planning, implementation, and build-out	ISICSB Public Safety Broadband Committee	Contingent upon guidance from FirstNet
		11.4 Monitor compatibility with ongoing NG911 initiatives	ISICSB Public Safety Broadband Committee and E-911 Program Manager	Contingent upon build out of NPSBN
		11.5 Conduct an end-user applications needs assessment for the NPSBN	ISICSB Public Safety Broadband Committee and RICs	August 2016
		11.6 Identify end-user applications for first responders using NPSBN	ISICSB Public Safety Broadband Committee and RICs	Contingent upon user needs assessment and NPSBN build-out
12	Continue to explore the development of a 700 MHz statewide LMR plan and system	12.1 Follow DPS's and DOT's RFP process for possible follow-up to a statewide system.	ISICSB	Contingent upon results of state agency's RFP and funding.
		12.2 Explore statewide system alternatives, dependent upon RFP and funding results.	ISICSB	Contingent upon results of state agency's RFP and funding.
13.	Established statewide standards to include Radio – APCO P25, E-911 – NENA i3, data – FirstNet	13.1 Adopt APCO P25 as a statewide standard	ISICSB and E-911 Communications Council	March 2014

Technology Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		13.2 Formalize distribution of existing guidelines for interoperability channel nomenclature	ISICSB and E-911 Communications Council	January 2015
	Established statewide standards to include Radio – APCO P25, E-911 – NENA i3, data – FirstNet NG911 equipment installed at PSAPs to utilize end-to-end NG911 Emergency Services IP Network (ESI net) Wireline to wireless network migration	13.3 Conduct stakeholder town hall meetings statewide standards for Radio – APCO P25, E-911 – NENA i3, data – FirstNet	ISICSB and E-911 Communications Council	October 2015
		13.4 Encourage investments that align with new technologies, including public safety broadband, APCO P25, and NENA i3	ISICSB and E-911 Communications Council	January 2016
		13.5 Encourage PSAPs to utilize Carryover Grant Program to assist in purchasing equipment	E-911 Program; E-911 Communications Council	Ongoing
		13.6 Collaborate with Iowa Telecommunications Association (ITA), TCS, Iowa Network Service (INS), and Iowa Communication Network (ICN)	HSEMD, 911 Program	Ongoing
14	NG911 equipment installed at PSAPs to utilize end-to-end NG911 Emergency Services IP Network (ESI net)	14.1 Determine options and timeline for migration	TCS, INS, ITA	September 2013
15	Wireline to wireless network migration	15.1 Determine payment process for connectivity on how locals pay the State for accessing the wireless network	TCS, INS, ITA	November 2014
		15.2 Support migration efforts from wireline to wireless networks	TCS, INS, ITA	November 2018

## 5.10 Training and Exercises

The Training and Exercises section of the SCIP explains Iowa's approach to ensure that emergency responders are familiar with interoperable and emergency communications equipment and procedures and are better prepared for responding to real-world events. The ISICSB is charged with developing and delivering training and exercise elements that support the ongoing development and deployment of interoperable communications. The types of training to be delivered are determined by State level needs to support the SCIP as well as local or regional needs identified by local users of communications systems. These efforts have included COML, COMT, Auxiliary Communications, Audio Gateway, Communications Asset Survey and Mapping (CASM) tool, TICP, and SOP development workshops and training.

In July 2013, the ISICSB sponsored the State's first functional Communications Exercise (COMMEX) for trained COMLs and COMTs. In addition, the Iowa SWIC produced training and education PowerPoint presentations as well as assembled materials for use in training sessions and presentations regarding interoperability and narrowbanding. These materials were also placed on the ISICSB web site for all stakeholders. Training for emergency responders in interoperability and the NPSBN is anticipated in efforts moving forward. To ensure full participation in exercises, State and county emergency management agencies maintain an exercise schedule, in compliance with various Federal and State funding guidelines. As a result, several interoperable and emergency communications-related exercises of varying size and complexity are completed each year where communications is one of the tested elements.

While Iowa is focused on building on its current training and exercise efforts, challenges remain in terms of integrating communications-related elements into existing training and exercise efforts. Iowa is focused on identifying opportunities to build greater awareness of communications training and exercise needs through efforts such as establishing standardized exercise protocols. Also, focused effort is needed to support involvement and awareness of exercises for a broadened base of stakeholders to include PSAPs and dispatchers.

Table 4 outlines Iowa's goals and initiatives for training and exercises.

**Table 4: Training and Exercises Goals and Initiatives**

Training and Exercises Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
16	Developed standard exercise protocols for emergency communications and data interoperability to support exercises at local, regional, and State levels	16.1 Address as a standing business item on agendas for E-911 Communications Council and ISICSB Meetings	E-911 Communications Council and ISICSB	August 2013; Ongoing
		16.2 Meet with the Iowa HSEMD, HSEMD Training Officer, Iowa Fire Service	E-911 Communications Council and ISICSB	October 2013 and annually

Training and Exercises Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		Training Bureau, and ILEA on inclusion of emergency communications in exercises		
		16.3 Identify exercises life cycle funding	ISICSB Finance Committee and E-911 Communications Council	May 2014, annually
		16.4 Identify exercise needs and requirements through feedback from the RICs and local PSAPs	ISICSB Outreach Committee, RICs, E-911 Communications Council, and local partners as needed	June 2014
		16.5 Encourage exercises that incorporate specific communications objectives to improve interoperability and incorporate PSAPs	ISICSB Outreach Committee, RICs, E-911 Communications Council, and local partners as needed	September 2014, annual review in September
17	Maintained statewide communications asset management system (e.g., CASM Tool)	17.1 Conduct outreach and education regarding CASM and TICPs	ISICSB	October 2013
		17.2 Review current CASM data and identify gaps	ISICSB	April 2014, annually
		17.3 Update CASM	ISICSB	June 2014, annually
18.	Conducted Technical Assistance (TA) training focused on the dispatcher's role in successful emergency communications	18.1 Coordinate with the SWIC and ISICSB to develop date recommendations for technical assistance focusing on the dispatcher's role in successful emergency communications	E-911 Communications Council	August/September 2013
		18.2 Submit request to OEC through ISICSB/SWIC	SWIC	September 2013
		18.3 Schedule and promote the training opportunity	E-911 Communications Council	2014

## 19 Usage

The Usage section of the SCIP outlines efforts to ensure responders adopt and familiarize themselves with interoperable and emergency communications technologies, systems, and operating procedures in the State. Regular usage ensures the maintenance and establishment of interoperability in case of an incident. Iowa continues to seek opportunities to promote the use of plain language and standard channel nomenclature. The State is also seeking to better promote the use of national interoperability channels by identifying opportunities to increase use of the channels whenever possible. Although Iowa is focused on increasing use and familiarity of interoperability channels and plain language, this effort requires ongoing coordination and outreach to build awareness and buy-in across the State.

Table 5 outlines Iowa's goals and initiatives for usage.

**Table 5: Usage Goals and Initiatives**

Usage Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
19	Regular usage of designated interoperability channels	19.1 Coordinate programming of designated interoperability channels into public safety radio systems	ISICSB	January 2014
		19.2 Conduct outreach through RICs to ensure adoption of interoperability channels	ISICSB	January 2014, annually
		19.3 Promote use of COMLs/COMTs	ISICSB	Annually
20	Implemented plan for using plain language during multi-agency and/or multi-jurisdictional events (e.g., Incident Command System [ICS] standards)	20.1 Research standardized plain language for the State, as well as a limited set of necessary codes	ISICSB Operations Committee and E-911 Communications Council	May 2014
		20.2 Develop a recommended policy template for use of plain language	ISICSB SOP Committee	September 2014
		20.3 Conduct outreach, education, and exercises for defining the appropriate use and benefits of using plain language	ISICSB Outreach Committee and E-911 Communications Council	September 2015
21.	Accurately captured PSAP operational data, revenue, and expenditures for	21.1 Set up committee	E-911 Communications Council	June 2013

Usage Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
	efficiency at the State and local level for all PSAPs	21.2 Develop data tracking tool and present at Iowa APCO/NENA Conference	E-911 Program Manager	October 2013
		21.3 Begin data collection	Local 911 Service Boards	January 2014
		21.4 Submit data to 911 program manager annually	Local 911 Service Boards	March
		21.5 Compile and submit report to legislature every 2 years beginning in March 2016	E-911 Program Manager	March 2016

## 20 Outreach and Information Sharing

The Outreach and Information Sharing section of the SCIP outlines Iowa's approach for building a coalition of individuals and emergency response organizations statewide to support the SCIP vision and for promoting common emergency communications initiatives. Iowa is focused on ensuring efforts of the ISICSB and the E-911 Communications Council are mutually supportive by frequent coordination between the two groups. The ISICSB established an Outreach and Education Committee to communicate with stakeholders to educate them about interoperability, tools they may use to improve interoperability, such as CASM and TICPs, and support them in the build-out of a statewide interoperable communications system. One of the Committee's goals is to assist the ISICSB Governance Committee in forming RICs, as an outgrowth of the formal ISICSB governance structure in order to develop stakeholder support. The Outreach and Education Committee supports outreach efforts such as this and provide the needed education regionally and statewide.

In 2011, the ISICSB Outreach and Education Committee held a series of six regional workshops to facilitate the creation of RICs to assist in identifying the needs of local stakeholders and provide feedback and stakeholder input to the ISICSB. In addition to supporting the establishment of the RICs to increase stakeholder engagement, the ISICSB schedules four meetings every year at locations throughout the State to make them more accessible to local stakeholders. While scheduling these meetings throughout Iowa has helped, the ISICSB continues to encounter challenges in identifying the appropriate POCs in each county who coordinate local interoperability initiatives. To assist in identifying county-level interoperability POCs, the ISICSB now works closely with the E-911 Communications Council to coordinate efforts associated with identifying a centralized point of contact at the county level for related efforts.

The ISICSB and E-911 Communications Council are focused on increasing awareness and coordination with the State legislature to build stronger support from political decision makers. Recently during the past legislative session, the ISICSB supported the



E911 Communications Council's proposal for a wireless surcharge increase which was subsequently approved by the legislature. This recent legislative outcome based on a coordinated outreach effort between the ISICSB and E911 Communications Council demonstrates the ongoing importance and need to garner support and attention from political leadership. This is especially important when challenges are not explicitly publicized or known due to no recent failures in communications across the State. As a result, outreach and information sharing is an increasingly important aspect in the efforts of the ICICSB and E-911 Council to help build an understanding of the important efforts of these groups, especially as the need for dedicated funding sources for relevant projects and equipment becomes increasingly important.

Table 6 outlines Iowa's goals and initiatives for outreach and information sharing.

**Table 6: Outreach and Information Sharing Goals and Initiatives**

Outreach and Information Sharing Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
22	Established effective outreach approach, structure, and program among regional governance structures, stakeholders, citizens, and legislature	22.1 Evaluate and update existing outreach approach and processes as necessary	ISICSB and E-911 Communications Council and RICs	July 2014, annually each July
		22.2 Identify a funding source to implement comprehensive public information campaign on E-911 service, public safety communications, and interoperability	E-911 Communications Council; ISICSB	August 2014
		22.3 Develop tools/resources to disseminate information	E-911 Communications Council; ISICSB	August 2015
		22.4 Conduct a statewide public information campaign to inform the public as well as elected officials about all aspects of E-911 service, public safety communications, and interoperability within Iowa	E-911 Communications Council; ISICSB	August 2016

## 21 Life Cycle Funding

The Life Cycle Funding section of the SCIP outlines Iowa's plan to fund existing and future interoperable and emergency communications priorities. The legislation that established the ISICSB in 2007 was passed without dedicated State funding. As a result, the Board has operated and performed its work through a series of FEMA grants

obtained from 2007-2010. In 2011, FEMA substantially reduced the amount of grants it provides to State and local agencies to include the loss of Interoperable Emergency Communications Grant Program (IECGP) funding. As a result, Iowa's grant funding associated with interoperable communications expired in 2013 and the ISICSB must identify annualized funding source(s) moving forward.

The E-911 Communications Council is funded through the HSEMD and by individual Council members through their participation in meetings and activities. The primary funding methods for PSAPs across the State are wireline 911 surcharge fees that are managed by county joint E-911 service boards, and the wireless 911 surcharge fees that are managed by the State E-911 Program within HSEMD. The wireline fees are collected by wireline service providers from subscribers and remitted to the respective county Joint 911 Service Boards for the provision of E-911 services in those jurisdictions. The wireless 911 surcharge fees are collected by wireless service providers across the State and remitted quarterly to HSEMD for deposit into the State of Iowa E-911 Emergency Communications Fund, managed by the State E-911 Program Office. By statute, the fund is to be used to pay for wireless Phase II E-911 service across the State. The statute provides for specific amounts of the fund to be dedicated for:

- Reimbursement of wireless service providers, pursuant to contracts entered into by the State and the respective wireless carriers
- Network and database services necessary to facilitate wireless 911
- Operation of the State E-911 Program Office
- Twenty-five percent to be distributed to the Joint E-911 Service Boards for PSAP operations

The State also dedicated a portion of the funds for enhancement of its wireless program responsibilities, future development, and grants to local counties for special projects with an emphasis on NG911 technology and equipment.

Developing a funding solution in Iowa requires stakeholder involvement and coordinated effort. As noted in Section 5.6, the ISICSB supported the E911 Communications Council's proposal for a wireless surcharge increase which was subsequently approved by the legislature. This recent legislative outcome based on a coordinated outreach effort between the ISICSB and E911 Communications Council demonstrates the ongoing importance and need to identify opportunities to coordinate efforts associated with funding between the two groups. As the ISICSB and E-911 Communications Council identify funding for interoperable and emergency communications efforts in the State, they will work to incorporate the following considerations:

- A phased funding approach implemented systematically with a clear strategy focused on outcomes
- Partnerships to ensure involvement and input from various stakeholders to build consensus are necessary to move forward as a group
- Building broad working relationships through partnerships established in relevant interoperable and emergency communications efforts

Table 7 outlines Iowa's goals and initiatives for life cycle funding.

**Table 7: Life Cycle Funding Goals and Initiatives**

Life Cycle Funding Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
23	Established annualized funding source(s) for ISICSB	23.1 Identify staffing needs and cost estimates	ISICSB	October 2013
		23.2 Create a two- to five-year financial plan for interoperable communications	Governance and Finance Committees	December 2013
		23.3 Obtain political buy-in and support for interoperability funding	ISICSB	January 2014, ongoing
24.	Dedicated funding source at the State for E-911	24.1 Determine/identify monetary needs to support E-911	E-911 Communications Council	January 2015
		24.2 Coordination between E-911 Communications Council and Program Manager to document funding requirements	E-911 Communications Council and Program Manager	March 2015
		24.3 Present funding requirements to the HSEMD Director	E-911 Program Manager	April 2015
		24.4 Request additional appropriations from the Governor's Office	HSEMD Director	October 2015
25	Maintained funding source at the local level (beyond 911 fees) for E-911	25.1 Collect information regarding local maintenance and sustainment funding schemes / best practices	E-911 Communications Council	July 2016
		25.2 Promote the importance of maintenance and sustainment funding for E-911 activities at the local level	E-911 Communications Council	October 2016
26.	Reviewed use of 911 surcharge funds and further definition of what is eligible for expenditures	26.1 Set up 911 Surcharge Committee	E-911 Communications Council Chair	July 2014
		26.2 Analyze guidelines for the use of 911 surcharge funds. Revise and present	E-911 Communications Council	January 2015

Life Cycle Funding Goals and Initiatives				
Goal #	Goals	Initiatives	Owner	Completion Date
		recommended changes to the E-911 Communications Council	Surcharge Committee	
		26.3 Seek local input regarding the recommended uses of 911 surcharge funds	E-911 Communications Council	April 2015
		26.4 Present a formalized request to amend approved uses of 911 surcharge funding to the E-911 Program Manager	E-911 Communications Council	September 2015
		26.5 Present the recommendations to the HSEMD Director	E-911 Communications Council Chair and Program Manager	October 2015
		26.6 Propose legislative amendment to include suggested identified 911 surcharge fund uses	E-911 Communications Council	October 2015

## 6. IMPLEMENTATION

### 6.1 Action Plan

The Action Plan section of the SCIP describes the process Iowa will use to determine a plan to execute the initiatives in the SCIP. The joint ownership of the Iowa SCIP between the ISICSB and E-911 Communications Council ensures appropriate owners are assigned by their respective governing/advisory bodies. Both the ISICSB and E-911 Communications Council assign ownership of Goals and Initiatives within their respective groups to specific position(s) and/or committees.

### 6.2 Measures of Success

The Measures of Success section of the SCIP defines the measures that Iowa will use to monitor progress and indicate accomplishments toward achieving the vision for interoperable and emergency communications. Table 8 outlines these measures for Iowa. More information on how these measures are managed is included in Section 6.3.

**Table 8: SCIP Measures of Success**

<b>Measures of Success</b>					
<b>Goal #</b>	<b>Strategic Goal(s) Supported</b>	<b>Initial State</b>	<b>Target</b>	<b>Measure Completion Date</b>	<b>Owner or Source</b>
1.	Effective coordinated approach between entities (e.g., ISICSB and E-911 Communications Council)	Some collaboration taking place	Governing bodies consult and confer on all public safety communication interoperability issues as a regular practice	August 2014	ISICSB and E-911 Communications Council
2.	Established effective regional governance structures (e.g., RICs)	Communications governance is informal among local and regional entities	Effective RIC governance in support of interoperable public safety communications statewide	July 2016	ISICSB
3.	Established core entity to coordinate emergency communications within each county in the State and participate in the regional governance structures	Emergency communications oversight and guidance provided by the County Sheriffs and first responders	A single POC identified and a regional governance structure established within each county in accordance with State law	July 2016	ISICSB and E-911 Program Manager
4.	Established Office of Emergency Communications at the State and local levels to oversee all aspects of public safety communications and public warnings	Public safety emergency communications is the responsibility of the DHEMD, although there is no central coordination point	Establishment of or identification of a group within an existing State agency that will coordinate public safety communications and public warning systems within the State	October 2016	ISICSB and E-911 Communications Council

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
5.	Strengthened E-911 Communications Council authority as an advisory council	E-911 Communications Council has limited authority as an advisory body, which is delineated in administrative rules and in Iowa Code	E-911 Communications Council will be included in all PSAP related discussions and operational decisions made by the HSEMD	July 2015	E-911 Communications Council
6.	E-911 Communications Council membership representative of the current communications environment (e.g., VoIP providers)	Membership of the E-911 Communications Council has not been reviewed and/or updated to reflect the changing communications environment	E-911 Communications Council's membership reflects representation from public and private sector entities directly involved in the provision of mission critical public safety voice and data resources	July 2015	E-911 Communications Council
7.	Administrative Rules inclusive of the process for E-911 Communications Council oversight of carryover funds	E-911 Communications Council is not included in the decisions made by HSEMD regarding carryover funds	Administrative rules include a process whereby the E-911 Communications Council is consulted on the allocation of carryover fund awards	July 2014	E-911 Program Manager
8.	E-911 Communications Council and ISICSB bylaws reviewed and analyzed on a bi-annual basis and updated as needed to reflect the communications environment	E-911 Communications Council bylaws have not been reviewed and updated since 2006; ISICSB bylaws are reviewed regularly	Bylaws for the ISICSB and the E-911 Communications Council are reviewed and updated to reflect the changing public safety interoperable communications landscape	January 2014	ISICSB and E-911 Communications Council

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
9.	Formalized system/process for managing the life cycle of SOPs and guidelines	SOPs are handled at the local and regional levels in the State	Standardized SOPs and documented best practices are made available to all public safety related communication entities within the State	January 2015	ISICSB and E-911 Communications Council
9a.	Current Wireless 911 Guidelines	PSAPs across the State handle wireless 911 calls and data transmissions according to locally accepted practices and guidelines	Standardized guidelines for wireless 911 operations approved, made widely available, and used by 50% of PSAPs within the State	October 2014	E-911 Communications Council
9b.	Recommended standard call-taking procedures	PSAPs within the State use locally developed and accepted call taking procedures	Standardized guidelines for 911 call taking operations approved, made widely available, and used by 50% of PSAPs within the State	September 2015	E-911 Communications Council
10.	Consistent statewide policies and procedures for interoperability solutions (e.g., PSAPs, LMR, and public safety broadband)	Local and regional practices differ on the regular use and testing of available interoperability solutions	Standardized policies and procedures for the regular use and testing of interoperability resources approved, made widely available, and used by 50% of the public safety community within the State	November 2017	ISICSB and E-911 Communications Council



Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
11.	Formalized strategy for statewide build-out of the NPSBN in Iowa	ISICSB has been identified by the Governor as the single POC for FirstNet and the NPSBN, and a public safety broadband committee has been established	Strategy formulated and operational plan in place that will provide mission critical wireless data capabilities to 30% of all public safety agencies within the State, pending a decision by the Governor to opt-in to the NPSBN	December 2016	ISICSB and E-911 Program Manager
12	Establish a statewide LMR communications system in Iowa	Monitor State agencies (DPS, DOT, DNR, DOC) statewide communication plans, funding, and systems improvement.	Coordinate with State agencies on any future statewide communication system or system-of-systems connectivity.	January, 2015	ISICSB
13	Established statewide standards to include Radio – APCO P25, E-911 – NENA i3, data – FirstNet	Local agencies and RICs have oversight of public safety communications	Standards that encourage investments in new technologies, including public safety broadband, APCO P25, and NENA i3 approved, made widely available, and used by 50% of the public safety community within the State	January 2016	ISICSB and E-911 Communications Council
14	NG911 equipment installed at PSAPs to utilize end-to-end NG911 ESI net	NG911 backbone is available within the State but not widely used	NG911 capabilities available and in use at 70% of PSAPs within the State	October 2018	E-911 Communications Council

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
15	Wireline to wireless network migration	Commercial carriers are hesitant to make the switch due to concerns about declining revenues	Business plan or model is in place that enables up to 50% of the State to migrate from wireline to wireless services	November 2018	E-911 Communications Council
16	Developed standard exercise protocols for emergency communications and data interoperability to support exercises at local, regional, and State levels	Interoperable communications and associated injects are not included in a majority of public safety functional exercises within the State	Standardized exercise objectives that incorporate the use of mission critical voice and data interoperability resources developed, made available, and used by 75% of the public safety community within the State	September 2014	ISICSB and E-911 Communications Council
17.	Maintained statewide communications asset management system (e.g., CASM Tool)	The use of the CASM tool is not uniform across the State	80% of public safety agencies within the State use and maintain CASM, including communications related assets	June 2014	ISICSB
18	Conducted TA training focusing on the dispatcher's role in successful emergency communications	Disparate training that focuses on the dispatcher's role in successful emergency communications being provided across the State	OEC provided TA training completed and attended by representatives of at least 50% of PSAPs and dispatch centers within the State	December 2014	SWIC and E-911 Communications Council

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
19	Regular usage of designated interoperability channels	Little standardization in place regarding the use of designated interoperability channels and frequencies	Designated interoperability channels and frequencies programmed into 100% of public safety radio systems, and COMLs used at 75% of all multi-jurisdictional responses within the State	January 2015	ISICSB
20	Implemented plan for using plain language during multi-agency and/or multi-jurisdictional events (e.g., ICS standards)	NIMS and ICS principles not being employed uniformly across the State	Recommended policy template in place and 100% of all public safety entities in Iowa using plain language for LMR transmissions	September 2015	ISICSB and E-911 Communications Council
21.	Accurately captured PSAP operational data, revenue, and expenditures for efficiency at the State and local level for all PSAPs	No uniform program or system in place to capture and record PSAP operational data, revenue, or expenditures	Data tracking program developed and used by 80% of all PSAPs within the State	March 2016	E-911 Program Manager
22	Established effective outreach approach, structure, and program among regional governance structures, stakeholders, citizens, and legislature	Public safety communications related outreach and education program(s) are in initial stages of development	Multimedia outreach materials focusing on the importance of maintaining effective public safety interoperable communications distributed and made available to legislators, decision makers, stakeholders, and taxpayers	August 2016	ISICSB and E-911 Communications Council

Measures of Success					
Goal #	Strategic Goal(s) Supported	Initial State	Target	Measure Completion Date	Owner or Source
23	Established annualized funding source(s) for ISICSB	No designated funding stream or source dedicated for ISICSB functions	Dedicated source of funding identified and in place for ISICSB functions	June 2014	ISICSB
24	Dedicated funding source at the State for E-911	No designated funding stream at the State level of government dedicated for E-911 functions	Dedicated source of funding identified and in place at the State level of government to support E-911 operations in the State	June 2016	E-911 Communications Council
25	Maintained funding source at the local level (beyond 911 fees) for E-911	Dedicated funding, in addition to 911 surcharges, for E-911 operations is largely unavailable at the local levels of government in Iowa	30% of local governments in the State have identified and dedicated funding streams, separate from 911 surcharges, to support local E-911 operations	October 2016	E-911 Communications Council
26	Reviewed use of 911 surcharge funds and further define what is eligible for expenditures	Allowed uses for 911 surcharge funds are specified in State law	Expanded uses for 911 surcharge funds, in order to maintain safe and effective public safety interoperable communications, identified and approved by the State legislature	June 2016	E-911 Communications Council

### 6.3 Management of Success

The Management of Success section describes the iterative, repeatable method Iowa will follow to add, update and refine the measures of success. To ensure ongoing progress, goal owners will report back to the ISICSB and E-911 Communications Council through an annual review. The SWIC will document progress updates and report on them through the APR each year.

## 6.4 Strategic Plan Review

The Strategic Plan Review section outlines the process Iowa will use to conduct reviews of the SCIP to ensure it is up to date and aligned with the changing internal and external interoperable and emergency communications environment as well as to track and report progress against the defined initiatives and measures of success. To ensure joint review, input, and agreement on the Iowa SCIP, the SWIC will coordinate a joint session between the ISICSB and E-911 Communications Council annually to review the SCIP and determine where updates are needed. Both the ISICSB and E-911 Communications Council will ensure that the chairs for each group be included on their regular agendas to promote ongoing coordination and updates between the two groups. Meeting agendas will also include time for updates on major accomplishments and milestones associated with identified SCIP goals and initiatives. In addition, there will be a semi-annual meeting among executive leadership of the ISICSB and E-911 Communications Council to review progress and identify needs for updating the SCIP.

## 7. REFERENCE MATERIALS

The Reference Materials section outlines resources that contribute additional background information on the SCIP and interoperable and emergency communications in Iowa. Table 9 includes the links to these reference materials.

**Table 9: SCIP Reference Materials**

Title	Description	Source/Location
E-911 Task Force Recommendations: Report to the Iowa General Assembly	Report to the Iowa General Assembly that provides a systematic review of E-911 and interoperable communications in Iowa to identify any possible areas for improvement and increase efficiency	<a href="http://www.homelandsecurity.iowa.gov/programs/E_911.html">http://www.homelandsecurity.iowa.gov/programs/E_911.html</a>
ISICSB Website	ISICSB website that provides up-to-date information and documents related to ISICSB efforts.	<a href="http://www.isicsb.iowa.gov/">http://www.isicsb.iowa.gov/</a>
E-911 Communications Council Website	E-911 Communications Council website that provides up-to-date information and documents related to E-911 Communications Council efforts.	<a href="http://www.homelandsecurity.iowa.gov/programs/E_911.html">http://www.homelandsecurity.iowa.gov/programs/E_911.html</a>
ISICSB Master Plan	Statewide Master Plan as a result of a 2008 survey of Iowa's public safety communications systems and future direction. The plan proposed utilizing the newly created 700 MHz public safety spectrum to create a statewide communications network allowing for interoperability at several different levels, as depicted in the SAFECOM Continuum. It was approved by the ISICSB and adopted as Iowa's public safety communications vision in November, 2009. Unfortunately, a lack of state funding has prevented any progress on this vision.	<a href="http://www.isicsb.iowa.gov/">http://www.isicsb.iowa.gov/</a>

## APPENDIX A: MAJOR SYSTEMS

List all existing major interoperable and emergency communications systems in the table below. As the State updates the SCIP, note if and how major systems have been updated or if new systems have been developed..

**Table A-1: Major Systems, Updates, and New Systems**

Major Systems Information						
System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
State Agency System	Iowa Department of Public Safety (DPS)	Iowa DPS	VHF-UHF, non-P25 high band	<i>DPS 3000 users</i>	State	Existing, but will need to be updated/replaced in 2014 due to narrowband requirements.
			Voice			
			<i>31 Sites</i>			
State Agency System	Iowa Department of Transportation (IDOT)	Iowa (IDOT)	VHF P25 Conventional, Narrowband	<i>Approx. 1500 IDOT</i>	State	Existing System
			Voice			
			<i>150 sites</i>			

Major Systems Information						
System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
Regional System -Tri-State (Iowa, South Dakota, Nebraska)	Woodbury STARCOM System	Tri-state (Iowa, South Dakota, Nebraska) regional	800 MHz, P25 system	953 Users	Local, Regional State	Existing System
			Voice			
			5 sites 6 channels			
Regional System (Multi-State)	RACOM Network	Regional, multi-state Privately Owned	Privately owned, 800 MHz EDACS infrastructure available for lease and use by a number of Iowa and surrounding states' public safety agencies	[Insert the estimated number of subscribers as well as the number of agencies on the system]	Local, Regional State	Existing System; Planned conversion to P25 system.
			Voice			
Multi-county System (tied to Johnson County's system)	Linn County	Linn County Radio Governance Board	800 MHz, P25 Voice with 256 bit AES Encryption; 7 sites	1400 across 45 agencies	City County,	Planned operational by December 31, 2013
Regional (Multi-City, Multi-County)	WRICS (Westcom Regional Interoperable Communications System)	Cities of: Clive, Norwalk, Urbandale, West Des Moines consolidated as Westcom	Single site Motorola 800MHz analog (APCO Project 16 compliant) trunked voice and four site Motorola 800MHz digital (APCO Project 25 compliant) trunked simulcast integrated voice and data radio system with numerous legacy VHF conventional interoperability channels.	1,800; Clive (Fire/EMS, LE, PW, Parks); Norwalk (Fire/EMS, LE PW, Parks); Urbandale (Fire/EMS, LE PW, Parks); West Des Moines (EMS,	Municipal	Existing System



Major Systems Information						
System Type	System Name	System Owner(s)	System Description	# Subscribers and Agencies	Users' Level of Government	Status and Changes/Updates
				Fire, LE,PW, Parks, Human Serv), School Dist. and other mutual aid partners on a secondary basis: Cities of Des Moines, Windsor Heights, Johnston, Waukee, County of Dallas, State of Iowa.		
Regional Metro System (Multi-county/multi-state)	ORION	Douglas County, NE; Washington County NE; Omaha Public Power District, Pottawattamie County, IA	800 MHz Astro 7.11 P25 M-core Trunking System, Voice; 700 MHz High Performance data System	5000	City, Counties of Douglas, Sarpy, Washington in Nebraska and Pottawattamie in Iowa, Federal	Existing system
City/County (Countywide) Multi-County	Joint Emergency Communication (JCOM)	JECSA – Joint Emergency Communications Services Association of Johnson Cnty.	700/800 MHz P25 Compliant Harris Digital Trunked Encrypted	35 Agencies Subscribers - 1,286	Local	Existing

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## APPENDIX B: LIST OF ACRONYMS

AAR	After Action Report
APCO	Association of Public Safety Communications Officials
APR	Annual Progress Report
AUXCOMM	Auxiliary Communications
CASM	Communications Asset Survey Mapping
COML	Communications Unit Leader
COMT	Communications Unit Technician
DHS	U.S. Department of Homeland Security
E-911	Enhanced 911
EMA	Emergency Management Agency
EMS	Emergency Medical Services
FCC	Federal Communications Commission
FirstNet	First Responder Network Authority
HSEMD	Homeland Security and Emergency Management Department
ICN	Iowa Communication Network
ICS	Incident Command System
INS	Iowa Network Services
IECGP	Interoperable Emergency Communications Grant Program
ILEA	Iowa Law Enforcement Academy
ISICSB	Iowa Statewide Interoperable Communications System Board
ITA	Iowa Telephone Association
IP	Internet Protocol
MHz	Megahertz
LMR	Land Mobile Radio
LTE	Long Term Evolution
MHz	Megahertz
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NCSWIC	National Council of Statewide Interoperability Coordinators
NECP	National Emergency Communications Plan

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NENA	National Emergency Number Association
NG911	Next Generation 911
NIMS	National Incident Management System
NPSBN	Nationwide Public Safety Broadband Network
NRF	National Response Framework
NTIA	National Telecommunications and Information Administration
OEC	Office of Emergency Communications
P25	Project 25
POC	Point of Contact
PPD	Presidential Policy Directive
PSAP	Public Safety Answering Point
PSIC	Public Safety Interoperable Communications
RIC	Regional Interoperability Committee
RPC	Regional Planning Committee
SAA	State Administering Agency
SCIP	Statewide Communication Interoperability Plan
SLIGP	State and Local Grant Implementation Program
SOP	Standard Operating Procedure
SS7	Signaling System 7
STR	Strategic Technology Reserve
SWIC	Statewide Interoperability Coordinator
TA	Technical Assistance
TCS	Telecommunications Systems, Inc.
TICP	Tactical Interoperable Communications Plan
TTB	Telecommunicator Training Board
UHF	Ultra High Frequency
VHF	Very High Frequency
VoIP	Voice over Internet Protocol